

## **CASE STUDY—WATER QUALITY**

### **ETV PROVIDES LEADERSHIP IN HELPING TO MEET WATER QUALITY REQUIREMENTS**

Over the past few years, interest in storm water and other human generated runoff into our nation's receiving waters has dramatically increased. As a result there has been a strong push for the application of new technology for removing various contaminants from runoff, particularly in urban areas. With the approaching compliance deadline of EPA's Phase II Storm Water Rule (March 10, 2003), many states, municipalities, and surface water planners are struggling to determine what measures will meet the rule's Best Management Practices (BMPs) requirement. In many applications, the use of proprietary technologies such as separators and filtration devices will be needed. However, a wide variety of technologies is emerging, and a reasonable and uniform method of verifying the performance of the technologies is needed. ETV has provided such a method.

EPA, through its ETV program, has partnered with NSF International to develop test protocols that determine whether technologies actually perform at the levels claimed. Through the Wet Weather Flow Technologies (WWF) and Source Water Protection Technologies (SWP) Pilots, vendors are able to get verification of their products' capabilities, benefitting the federal government, states, municipalities, private sector end users, and manufacturers of these technologies. The storm water treatment testing under the WWF Pilot will provide verification utilizing data generated from field studies over a period of at least 15 wet weather events. This will provide data points from a variety of conditions to show how various technologies function under different types of events. The SWP Pilot is evaluating performance of in-drain treatment devices utilizing vendor claimed flow rates and typical contaminant loadings. The testing will be completed in a laboratory setting to replicate field conditions for floor drains and other human generated flows. These pilots provide a uniform avenue for state and local governments to determine the level of performance at which the technologies actually perform. The availability of this information will result in substantial cost savings to both the tax payer and the private sector by providing direction for approving BMP use in meeting federal storm water requirements.

One vendor participating in these pilots is **Hydro Compliance Management, Inc.** (Whitmore Lake, Michigan), who manufactures the Hydro-Kleen Filtration System. This drain insert is advertised as a low cost yet effective device for removing urban contaminants such as hydrocarbons, heavy metals, sediments, and other typical urban contaminants from runoff entering drains. Hydro Compliance, whose product is being tested under both the WWF and SWP Pilots, has recognized that acceptance of its technology by users and regulators faces strong resistance and a demand for independent third party verifications. "The bias against proprietary storm water technologies across the nation is strong. Many claims by vendors in the past have turned out to be less than accurate, and have resulted in many wasted dollars by users," says David Woelkers of Hydro Compliance. Many states have begun developing their own requirements and protocols for allowing technologies to be used as acceptable BMPs to meet NPDES compliance. The dilemma created by these various state requirements is that manufacturers are faced with having to conduct various third party testing at multiple sites—which is cost prohibitive to most companies. This also limits the options for municipalities who must get permit coverage, since a particular technology may be useful but not acceptable in a particular state unless it has been approved as meeting that state's verification requirements. Many states have begun to recognize this dilemma and have acknowledged that completing testing under EPA's ETV Program will assist in gaining acceptance as an alternative for meeting approved use requirements. "The protocols developed through ETV will enable us to reach the entire market with high quality data. Without ETV we would have faced insurmountable financial barriers in bringing the Hydro-Kleen to the market," says Woelkers.

Moreover, customers of Hydro Compliance have been impressed with the thoroughness of the ETV testing requirements. "The fact that the Hydro-Kleen is being tested in the ETV Program has raised my comfort level with installing them at our O'Hare Airport facilities," says Ed Lopez, Sr., Administrator Safety/Environmental for American Airlines at O'Hare Airport.